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Teaching and education; collaborative style

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Abstract

Collaborative teaching is a teaching practice that includes groups of students working together to solve a problem, complete a task or create a product. There is a trend toward collaboration in the 21st century, as; collaborative teaching, learning, thinking and working. In education, collaboration is the most successful promotion of teaching programs for the majority of students. There is a change in role of teachers who use collaborative learning approaches. In a collaborative setting, teachers are no longer as experts transmitting knowledge to the students, but they act as experts who design academic programs for students, as instructors or mentors particularly in the emergent learning process. This review article seeks to define the collaborative style of teaching and learning, the basic elements of it and the main benefits thereof.

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1. Introduction

During more than three decades ago, essential changes in higher education have been undertaken to an extraordinary and global extent. The prevalent change of these reforms is the necessity for a shift in the educational pattern that is from a traditional teacher-directed paradigm toward a student-centred learning. This topic has been articulated well by Barr and Tagg (1995) and includes the basic reform that supports further many other reforms in higher education.

Learners who work together in cooperative teams achieve higher level of thoughts, preserve information and keep knowledge more than learners who work individually (Johnson, & Johnson, 1986). Samuel Totten, et al. (1991) stated that joint learning and sharing knowledge, give learners the opportunity to discuss about the subject, be responsible about their learning, and therefore lead to create crucial thinkers.

There is a trend toward collaboration in 21st century. Individuals need increasingly to think and work together in societies, on critical subjects (Austin, 2000; Welch, 1998). This leads to a transition from individual efforts to group work, and from independence to community (Leonard, & Leonard, 2001).

Laal, et al. (2012) noted that Confucius in 2400 years ago stated:

- What you tell me; I will forget,
- What you show me; I may remember,

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- What you involve me; I will understand.

Confucius considered *the active involvement* of learners as the most efficient tool to assist perfectly them to keep the knowledge. What Confucius called involvement is now the same desire of learners to be involved and engaged in their learning process (Hsu, & Malkin, 2011). Lecturing does not, by its own, cause learning. Learning needs to the individual's mental processing, as Melvin L. Silberman (1996) claimed. He said learning is not acquired by pouring information into one's head. Silberman developed an adjustment of what Confucius said and called *The Active Learning Credo* that shows the opinion of further learning by individuals, as follows:

- What I hear, I forget
- What I hear and see, I remember some
- What I hear, see, and ask questions about or discuss with someone else, I begin to understand
- What I hear, see, discuss and do, I acquire knowledge and skills
- What I teach to another, I master.

Collaboration style of teaching indicates a shift from a traditional teacher- or lecture-centred teaching to a student- or learner-centred learning in college classrooms. In a collaborative setting, the lecturing/ listening/ note-taking process seldom occur. Collaborative learning (CL) emphasizes on processes that include students' discussion and their active engagement with the subject. In CL practices, teachers don't think of themselves just as skilled transmitters of knowledge to the students. They more act as skilled instructors of intellectual experiences for students, as coaches or midwives of a more emergent situation (Smith, & MacGregor, 1992). This article strives to weave its own particular focus on the topic, presenting the concept of the term, and describes important benefits that follow implementing CL. The core argument is to defend the notion of liberal education but within a revised framework of flexibility that enables learners to study at their own pace.

2. Material and Method

This article reviews surveys about collaborative style of teaching and learning. This paper starts with a brief history of CL and continues with the definition and concept of the term. It describes the key elements of CL and presents major benefits thereof. Key issues were identified through review of literature on the CL, through review of literature on its elements and through review of literature on the benefits of CL.

3. Results

Kenneth Bruffee (1996) stated that the idea of CL was based on the efforts of British teachers and researchers in the 1950s and 1960s. A teaching physician, M.L.J. Abercrombie found that the medical students who work together as a group, made faster diagnosis and better judgments than those students working alone. Bruffee first encountered with the belief of CL when he met the results of a group of researchers who thought that CL stemmed from an attack against authoritarian teaching styles (p. 85). A decade later, college professors increasingly worried about the students who had difficulty with the transition into writing at the college-level. Researchers found that the help-seeking by students was too similar to classroom learning. The students needed a substitute for traditional classroom learning, not an extension of it (p. 86).

From the socioeconomic aspect, learners require and deserve stimulating, supportive, instructional environments, attractive subjects, and the opportunity to learn in situations which provide collaboration with peers, teachers, and the larger world community (Executive Summary, 2008).

Collaborative teaching and learning is a teaching practice that includes groups of students working together to explore a problem, finish a task or produce a substance (MacGregor, 1990).

What one understands from the term of CL is the social act of learning in which individuals talk with each other. It is through talking that learning occurs (Gerlach, 1994,).

Many studies have researched the concept of CL, the grouping and pairing of individuals toward achieving a common learning goal. CL is an instruction method in which students with different levels of performance, work together in small groups to gain a common goal. They are responsible for the achieved learning, one another's as well as their own. Therefore, the success of one student helps the other students to be successful and also the success of one learner depends to the success of the group (Gokhale, 1995).

Woods and Chen (2010) cited Johnsons (1994) that demonstrated five conditions must be met for a more productive and successful CL, as:

- Positive interdependence;
- Promotive interaction;
- Individual and group accountability;
- Social skills, and;
- Group processing.

Brown and Lara (2011) cited Johnsons' survey (2009) of educational research on cooperative learning that shows cooperation in comparison to competitive or individualistic efforts, leads to;

- Higher achievement and more productivity;
- More caring, supportive, and committed relationships, and;
- Greater psychological health, social competence and self esteem.

4. Discussion

In education, collaboration has been the most effective teaching instruction to promote students, for the greatest number of learners (Pugach, & Johnson, 1995).

CL is an umbrella term including various educational practices that involve shared academic works of students, or students and teachers together. Usually students are working in groups of two or more, mutually searching for understanding, solutions, meanings, or creating a product. CL practices vary extensively, but their core centre is on student's not the teacher's work, they mainly focus on student's exploration, not simply the teacher's presentation (Smith, & MacGregor, 1992).

CL is not simply a synonym for students working in groups. Laals (2012) cite Johnson, et al. (1990), that the above 5 factors are the basic elements to qualify CL, as:

- Clearly perceived positive interdependence: Team members should rely on each other to reach the goal. If anyone fails to do his/her part, everyone suffers consequences. Members need to believe that they are linked together and they all succeed together. In a CL setting, they swim or sink together.
- Considerable interaction: Members help and encourage each other to learn. They do this by explaining what they understand, and by gathering and sharing knowledge. Group members must be done interactively, providing each other with feedback, challenging conclusions and reasoning, and perhaps most importantly, teaching and encouraging each other.
- Individual accountability and personal responsibility: All students in a group are accountable for their share of work and for all material to be learned.
- Social skills: Students are encouraged and helped to develop and practice trust-building, leadership, decision-making, communication, and skill management.
- Group self-evaluating: Team members set group goals, periodically assess what they are doing as a team, and identify the changes should be made in future.

Johnson, Johnson & Smith (1991) define a new paradigm of teaching, as:

1. Knowledge is created, detected, and transformed by students. Faculty provides situations in which learners can understand the concept of studied material, by processing it through existing cognitive structures and then keeping it in long-term memory where it remains open to further processing and possible reconstruction.

2. Learners actively make their own knowledge. Learning is thought as something a learner does, not something that is done to the learner. It is something achieved and actively involved, not something just passively heard. Students do not passively gain knowledge from the teacher or college. Students activate their existing cognitive structures or make new ones to be included.
3. Faculty effort is purposed to develop learners' skills, abilities and talents.
4. Education is a personal transaction among students and between the faculty and students as they work together.
5. All of the above can only take place within a cooperative context.
6. Teaching is supposed to be a mixture of applying theory and research that needs abundant and goodly teacher training and steady updating of skills and procedures.

CL paradigm has many advantages over competitive or individualistic learning. Laal and Ghodsi (2012) cite Johnsons (1989) and Pantiz (1999) who described over 50 benefits of CL. They categorized them in four groups. Main categories of CL advantages are:

Social benefits;

- Helps to establish a social support system for learners
- Results in making difference understanding among students and staff
- Develops a positive atmosphere for modelling and practicing cooperation
- Establishes learning communities

Psychological benefits

- Enhances learners' self-esteem
- Diminishes anxiety
- Promotes positive attitudes towards teachers

Academic benefits

- Develops essential thinking skills
- Involves learners actively
- Makes better the classroom results and improves outcomes
- Models profit conflict- and problem-solving practices
- Large lectures can be personalized
- Helps to motivate learners in college

Alternate student and teacher assessment techniques

- Collaborative teaching practices use different assessments

Along with the improvement of higher level reasoning skills of learners, they are able to understand the achieved information, analyse, evaluate, synthesize, and apply it, that are in opposite of the traditional education that mainly focuses on learning of the facts (Klemm, 1994).

5. Conclusion

CL proposes dealing with other individuals in a way that respects and features each individual's abilities, skills and contributions in group. There is a sharing of authority and acceptance of responsibility among group members for the groups' actions. A learning exercise only qualifies as CL, when the elements of: positive interdependence, considerable interaction, individual accountability, social skills and group processing, are present. Numerous potential benefits including: social, academic, psychological and assessment advantages follow implementation of learning in collaboration.

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